

polymer rails by supplying a mixture of an etching gas/acid neutralizing gas of HF/NH₃ to form a water soluble material of sidewall polymer rails left behind on the Al/Cu metal line from the RIE process; and

c) deionized water rinse chamber means to remove water soluble material.

16. (4th Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

I. an integrated metal etch tool interfaceable with [comprising therein]:

(a) vacuum chamber means to provide a mixture of etching gas/acid neutralizing gas of HF/NH₃ to said structure to form a water soluble material of sidewall polymer rails left behind on Al/Cu metal line from the RIE process; and

(b) strip chamber means for removal of photo-resist from said structure by chemical downstream etching or plasma.

CORRECTED VERSION OF THE AMENDED CLAIMS

13. (4th Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

I. an integrated metal etch tool interfaceable with:

a) strip chamber means for water only plasma to strip photo-resist of a semiconductor composite structure subsequent to a RIE to limit thickness of sidewall polymer rails;

b) vacuum chamber means to chemically modify sidewall polymer rails by supplying a mixture of an etching gas/acid neutralizing gas of HF/NH₃ to form a water soluble material of sidewall polymer rails left behind on the Al/Cu metal line from the RIE process; and

c) deionized water rinse chamber means to remove water soluble material.

16. (4th Amended) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

I. an integrated metal etch tool interfaceable with:

(a) vacuum chamber means to provide a mixture of etching gas/acid neutralizing gas of HF/NH₃ to said structure to form a water soluble material of sidewall polymer rails left behind on Al/Cu metal line from the RIE process; and

(b) strip chamber means for removal of photo-resist from said structure by chemical downstream etching or plasma.